Academic Year (2022-23)
Year: T. Tech   Semester: V

Program: B. Tech. (Minor in Web Application Development)   **Max. Marks: 75**
Subject: Advanced Java Programming   **Time: 10:30 am to 1:30 pm**
Date:03/01/2023   **Duration: 3 Hours**

REGULAR EXAMINATION

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover page of the Answer Book, which is provided for their use.

(1) This question paper contains 2 pages.
(2) All Questions are Compulsory.
(3) All questions carry equal marks.
(4) Answer to each new question is to be started on a fresh page.
(5) Figures in the brackets on the right indicate full marks.
(6) Assume suitable data wherever required, but justify it.
(7) Draw the neat labelled diagrams, wherever necessary.

Question No.		Max. Marks
Q1 (a)	Explain Exception Handling in Java? Explain different terms related to it.	[05]
	OR	
	Explain method overriding with relevant examples.	[05]
Q1 (b)	i. Explain features of struts 2 framework.	[05]
	ii. Write a program to use the concept of Dynamic Method Dispatching.	[05]
Q2 (a)	i. Differentiate between AWT and swings.	[05]
	ii.Differentiate between servlet and JSP.	[05]
Q2 (b)	Write and Explain major phases of JSP Life Cycle.	[05]
	OR	
	Compare BLOB and CLOB.	[05]
Q3 (a)	Explain recursion with relevant code snippets.	[05]
	OR	
	Create an user defined Exception called as "MonthFormatException", which will be triggered when an invalid month number is entered by user.	[05]
Q3 (b)	Draw and explain JDBC Architecture in detail.	[10]
	OR	

		Create one user defined package called as area, to find area of a Circle. Import this package in the Main class and find area of a Circle in main().	[10]
Q4 (a)		i. Write a program to demonstrate method overloading.	[04]
		ii. Discuss Garbage collection mechanism in java.	[04]
		OR	
		i. List and Explain different components present in javax package.	[04]
		ii. Explain the concept of finalize() method in java with examples.	[04]
Q4 (b)		Explain different types of JDBC drivers.	[07]
		OR	
		Explain Servlet lifecycle with suitable code snippets.	[07]
Q5 (a)		**Write short notes. (any two)**	
		i. this keyword	[05]
		ii. final keyword	[05]
		iii. Interceptor	[05]
Q5 (b)		Differentiate between JSON and XML	[05]